

Welcome to the MTL “Road-Show!”



MTL

**Materials
Testing
Laboratory**





Our Mission

***“To Deliver Excellent, Timely,
and Cost Effective Materials
Engineering Services”***

MTL Quality Assurance Program

- National Voluntary Laboratory Accreditation Program



- Nationally Recognized Test Procedures



- Experienced, Certified Personnel



Testing and Inspection Services

- Hot Mix Asphalt (HMA) Testing
- Portland Cement Concrete Testing
- Quarry Products Testing
- Treated Base Testing (LTB, CTB, Soil Cement)
- Compaction Testing of HMA, Soils, and Aggregates
- Inspection of Reinforced Concrete Pipe (36" or greater)



Engineering Services

- Review of Plans and Specifications
- Review of Materials Submittals
- Geotechnical Services
 - Pavement Design
 - Log of Boring
 - Soil Classification (USCS)
 - Lime Treated Base Design



Services We Do Not Provide

Soils Reports for Buildings

Hazardous Materials Investigations

Environmental Engineering Services



One test is worth 1,000 expert opinions!



Inferior concrete and a construction job done “on the cheap, but not illegally” are blamed for the collapse of a school in Italy in 2002.



The concrete used to cover the core at Chernobyl was “hastily poured,” and is now leaking radiation and threatens to collapse.



NASA’s “Faster, Better Cheaper” philosophy has been called into question after a series of failed missions, including the failed Mars Climate Orbiter.



The Tropicana parking structure in Atlantic City collapsed while under construction in 2003. OSHA reports indicate that the contractor had switched to a cheaper and quicker construction plan.



"...AND WE CAN SAVE 700 LIRA BY NOT TAKING SOIL TESTS "

Cost Estimates

The MTL will develop written cost estimates for large projects when requested.

Estimates Include:

- CSJ staff time necessary to provide material Quality Assurance for the project**
- Citywide overhead charges included in staff hourly rates**
- Contingency of five percent for additional testing above quantities estimated**

Estimates DO NOT Include:

- Plan and Specification review and Pavement Design work**
- Night work or holiday work**
- Additional testing beyond 5% Contingency**

Cost Estimate Example

ESTIMATE FOR TESTING AND INSPECTION SERVICES
60-INCH BRICK INTERCEPTOR REPLACEMENT PH.1B
MATERIALS TESTING LABORATORY

Prepared By: Rino B. Biton

Date:

Construction Contract \$ 16,573,661

EARTHWORK

Trench - Select Native Fill

Field Work

Quantity	Type of Test	Hrs/Trip	# of Employees	Cost/Hour	Total Hours
40	Compaction Testing (CAL 231)	3	2	\$73.00	240

Lab Work

Quantity	Type of Test	Cost/Unit
40	Max. Density Curve (CAL 216)	\$250.00

Submittal Review

Quantity	Type of Test	Cost/Unit
5	Review of Submittal	\$180.00

SUBTOTAL FOR SELECT NATIVE FILL

Trench - Aggregate Subbase

Field Work

Quantity	Type of Test	Hrs/Trip	# of Employees	Cost/Hour	Total Hours
7	Sampling (CAL 201)	3	1	\$73.00	21
30	Compaction Testing (CAL 231)	3	2	\$73.00	180

Lab Work

Quantity	Type of Test	Cost/Unit
30	Max. Density Curve (CAL 216)	\$250.00
7	Sand Equivalent (CAL 217, 3 specimens)	\$250.00
7	Sieve Analysis (CAL 202, combined)	\$100.00

Submittal Review

Quantity	Type of Test	Cost/Unit
5	Review of Submittal	\$180.00

SUBTOTAL FOR AGGREGATE SUBBASE

Lab Management System (LMS)

The MTL uses an extensive database to track all labor costs for its projects.



City of San José, California

Materials Testing Laboratory
1661 Senter Road, Building A
San José, CA 95112
(408)998-6015 Fax: (408)971-4880



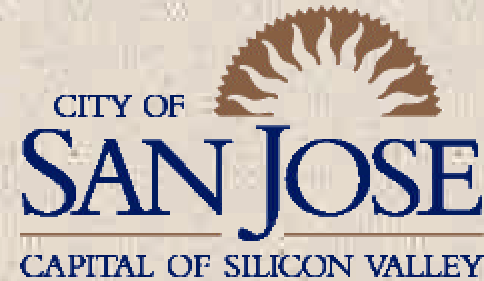
Charge Report - Weekly (w/o OH)
05/09/2005 to 05/15/2005

Monday, May 16, 2005

Page 1 of 1

<u>Charge #</u>	<u>Project</u>	<u>Hourly Cost</u>	<u>Total Hours</u>	<u>Total Cost</u>
001000611	ES-MTL Gf Non Reimburse	\$33.08	43.0	\$1,422.43
001000663	NVLAP QA Funding	\$39.25	2.0	\$78.50
001121315	Towers Lane Improvement Project	\$40.13	6.0	\$240.76
001162700	Slurry Seal-Prep Work Sec16	\$36.42	44.0	\$1,602.69
030060	Development Project Submittal Review	\$39.25	4.0	\$157.00
030073	Pavement Design-Lab-Non Res	\$36.54	78.0	\$2,850.16
030093	Inspection-Lab-Non Res	\$33.02	113.0	\$3,730.75
150000116	Compensated Absence	\$37.56	103.0	\$3,866.75
375117453	Penitencia Creek Reach 2 Ph 1 Dev	\$20.12	1.0	\$20.12
429065295	Senter Rd Widening-Singleton to Monterey	\$34.31	50.5	\$1,732.86
429118255	Story Rd. Widening (Senter - McLaughlin)	\$39.25	2.0	\$78.50
429133395	Bailey Av. Extension - Seg C @ Monterey	\$22.26	6.0	\$133.56
429135545	Civic Plaza / Fifth Street Streetscape	\$34.55	70.0	\$2,418.79
450109883	Psm221 King Rd & Story Rd Impv	\$40.57	4.0	\$162.26
450136615	3rd /4th St. Couplet Conversion	\$38.53	10.0	\$385.31
469131233	Albany-Kiely Storm Drain Impr Ph. II	\$19.18	4.0	\$76.72
471117109	Camden Multi-service Community Center	\$39.87	28.0	\$1,116.36
472129913	Cambrian Branch Library	\$40.49	7.0	\$283.43
472136345	Evergreen Branch Library	\$35.20	13.0	\$457.61
520127705	SJIA North Concourse Building Site Pkg1	\$38.92	10.0	\$389.16
527135413	Renzel Airfield Improvements 2005	\$40.72	40.0	\$1,628.75
545108163	Hwy 87 Sanitary Sewer Relocation PH II	\$35.76	20.0	\$715.24
545131055	University Area Sanitary Sewer Rehab	\$32.08	27.0	\$866.06
777773	Pavement Design/Lab-Res	\$35.68	53.0	\$1,891.12
Report Totals:		\$35.62	738.5	\$26,306.89

Our Clients

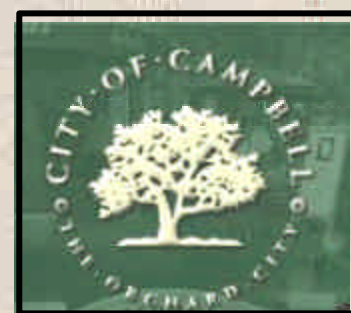


- **Public Works Department**
City Facilities Architectural Services
Engineering and Construction Services
Transportation and Development Services

- **Department of Transportation**
- **Environmental Services Department**
Water Pollution Control Plant
San Jose Municipal Water



**San Jose International
Airport Master Plan Team**




City Of Campbell



**Valley Transportation
Authority**

MTL Work Request Form

Download from our website
(<http://www.sanjoseca.gov/publicWorks/EngServ/MTL/instructions.htm>)
OR the City Intranet.



MATERIALS TESTING LABORATORY (MTL)
WORK REQUEST

FILE #
CHARGE #
EXT.

REQUESTED BY:
DEPT/DIV/SEC:
PROJECT:

☒ Routine (Completed in 10 working days)
☐ Priority (Completed in less than 10 working days. *MTL overtime authorized if necessary.*)
Date needed (priority requests only): MM/DD/YY

Geotechnical Services
☐ Pavement Design
☐ Pavement Overlay Design
☐ Pavement Thickness Determination
☐ Geotechnical Plan/Specification Review
☐ Soils Log of Boring Report
☐ Cost Estimate
☐ Other

Construction Services
☐ Plan/Specification Review
☐ Material Submittal Review
☐ Pipe Inspection/Testing
☐ A.C./P.C.C. Coring
☐ Treated Base Design/Inspection/Testing
☐ Cost Estimate
☐ Other

REMARKS / SPECIAL INSTRUCTIONS

GEOTECHNICAL INFORMATION

STREET / LOCATION	TRAFFIC INDEX**	DEPTH OF BORINGS**
1		
2		
3		

MTL USE ONLY

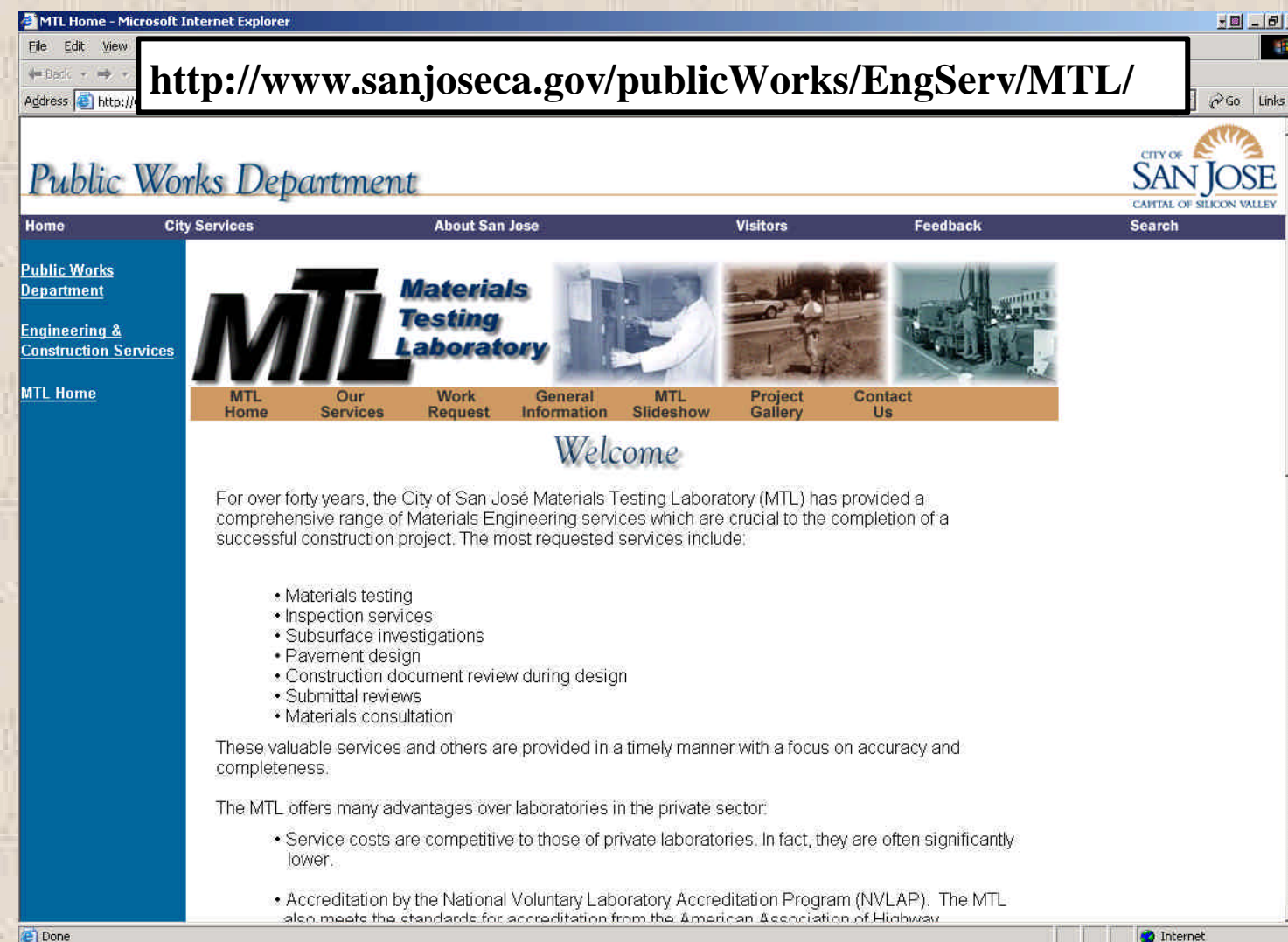
Received by: Assigned to: Completed:

a.m./p.m.

Route To: Materials Testing Laboratory, 1661 Senter Rd., Bldg. A, First Floor, San Jose, CA 95112

MTL Home Page

The MTL Web Site provides information about our services and current projects.



**The MTL Is Here to Serve
You, Our Client**

Please Call Us At 998-6015

